Generate Collection

L11: Entry 5 of 15 File: USPT Apr 24, 1990

DOCUMENT-IDENTIFIER: US 4919956 A
TITLE: Methods for drying honey and molasses

DATE ISSUED (1):
19900424

Brief Summary Text (3):
Natural honey is a sweet sticky fluid collected by bees and deposited in a wax honeycomb cell. Typically, honey contains substantial amounts of levulose and dextrose which are invert sugars or monosaccarides. Monosaccharides can be characterized as being partially hyrolized or predigested which renders them readily assimulatable in the digestive system as opposed to the disaccharides and polysaccharides. As a result of its partially hydrolized nature, honey is a vastly superior foot product and nutrient as compared with other natural food sugars. In addition to this, honey has a substantially greater sweetening ability than other natural sugars. The sticky viscous consistency of both liquid honey and molasses is a serious problems which has caused the use of molasses and honey to be limited.

Generate Collection

L2: Entry 12 of 14 File: USPT Mar 13, 1979

DOCUMENT-IDENTIFIER: US 4144357 A
TITLE: Preventing the Maillard reaction in synthetic dietary compositions

Brief Summary Text (3):
Most natural and processed foods contain one or more of intact protein, predigested protein (protein hydrolysates), amino acids and non-protein nitrogen. These nutrients are the building blocks of lean body mass (protein) and other nitrogen containing metabolites (for example, enzymes, vitamins, hormones, etc.). Carbohydrates normally present in foods can be simple (for example, dextrose, fructose, etc.) or very complex in nature (for example, fiber, pectin, starch, predigested starch [hydrolyzed cereal solids, dextrose oliogosaccharides, etc.], dextrin, etc.). Carbohydrates in foods supply energy, and desirable psychosensory benefits, such as taste and texture.

Brief Summary Text (6):
Many synthetic foods and special dietary products exist which contain, among other nutrients, amino nitrogen-containing (proteinaceous) compounds (e.g. one or more free amino acids or their salt derivatives, protein hydrolysates, intact whole proteins, or a combination of these) plus vitamins, including amino nitrogen containing vitamins, e.g. para-amino-benzoic acid (PABA), thiamine, niacin, choline, riboflavin, ascorbic acid, etc. and their derivatives, plus other, non-amino nitrogen-containing compounds, e.g. ammonium compounds such as ammonium sulfate, plus carbohydrates, including reducing sugars, e.g. glucose (also known as dextrose), fructose (also known as levulose) and 5-carbon or pentose sugars such as xylitol (also commonly called xylose), and other aldehyde containing compounds which may be found, for example in flavoring agents. Even non-reducing disaccharide sugars (e.g. sucrose, lactose, maltose, and their derivatives) may be hydrolyzed catalytically to produce the reducing sugar moiety, this reaction being promoted by the presence of moisture and elevated temperatures.

Brief Summary Text (10):
Such elemental diets are described, for example, in U.S. Pat. Nos. 3,773,930, issued Nov. 20, 1973, entitled "Amino Acid Compositions" and 3,821,432, issued June 28, 1974, entitled "Bland Amino Acid Compositions." They contain, among other nutrients, a blend of purified amino acids, free glucose and PABA. Other special dietary foods have been developed which contain amino acids, protein hydrolysates and whole protein, singly or in combination, as well as reducing sugars and, optionally, nitrogen containing vitamins. All of these dietary foods have been shown to suffer from short shelf lives of from six months to one year when stored at ambient temperatures (up to about 86.degree. F. [30.degree. C.]). This has been true even when product moisture levels have been reduced to less than 2% and expensive moisture barrier laminates have been used for packaging. Generally, the higher the finished product temperature and moisture content, the more pronounced or rapid the resultant Maillard reaction will be.

Brief Summary Text (41):
The amino acids were coated with pectin alone, with sucrose alone and with pectin and sucrose combined. In each case, an aqueous slurry was made of the proposed coating material and the amino acid mixture. The slurry then was dried in a vacuum oven and ground to a fine powder. The resulting mixture was blended with the remainder of the dietary components and subjected to accelerated aging. A similar experiment was repeated using a spray drier in lieu of the vacuum oven. While of some benefit, these techniques did not sufficiently alter the rate of the Maillard reaction. As regards the coatings containing sucrose, it is postulated that, during processing, small amounts of sucrose were hydrolyzed to glucose and fructose, which are reducing sugars that would initiate the Maillard reaction. This reaction requires a relatively low order of energy for its initiation and exhibits autocatalytic qualities once it has

started. We found that starch having a D.E. number between 0 and 24 was far superior in overall qualities as a coating to prevent the Maillard reaction.

Brief Summary Text (62):
In some cases, these mixtures were of purified free amino acids alone. In other cases, amino acids were present in purified form and as di-, tri- and longer peptides derived from predigested protein. As indicated above, the latter are also reactive with reducing sugars to produce the Maillard reaction.

Generate Collection

L11: Entry 12 of 15 File: DWPI Nov 27, 1985

DERWENT-ACC-NO: 1985-298136
DERWENT-WEEK: 198548

TITLE: Mixt. of germinated, fermented seeds - from cereals and leguminous plants, contg. lactic bacteria or lactic acid, for animal feeding

INVENTOR: RICCI, J L; ROPRAZ, C

PATENT-ASSIGNEE:

ASSIGNEE	CODE
SCHMUTZ P A	SCHMI

PRIORITY-DATA: 1984CH-0006056 (December 20, 1984), 1984CH-0001975 (April 19, 1984), 1984CH-0003190 (July 3, 1984)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
EP 162805 A	November 27, 1985	F	041	
CH 659764 A	February 27, 1987		000	
CH 663516 A	December 31, 1987		000	
DE 3560502 G	October 1, 1987		000	
EP 162805 B	August 26, 1987	F	000	

DESIGNATED-STATES: AT BE DE FR GB IT LU NL AT BE DE FR GB IT LU NL

CITED-DOCUMENTS:DE 2625334; DE 2627741 ; FR 1531378 ; DE 274916 ; US 1554913

APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
EP 162805A	April 17, 1985	1985EP-0810170	

INT-CL (IPC): A23C 9/12; A23K 1/08; A23L 1/17; B65G 69/20; C12C 1/04

ABSTRACTED-PUB-NO: EP 162805A
BASIC-ABSTRACT:

A mixt. of germinated seeds, contg. germinated, fermented cereal seeds, and germinated, fermented leguminous seeds, is preserved in the moist state by inoculating at least the germinated cereal seeds with lactic bacteria chosen for prodn. of lactic acid and preservative effect, and/or by an acid.

USE/ADVANTAGE - Is animal feeding, esp. farm animals, e.g. horses, cows, calves (claimed), heifers, pigs, goats, sheep and poultry, partic. prodn. of white veal. The process does not involve steeping or forced aeration. The mixt. contains high value nutrients, e.g. sugars, aminoacids, proteins, and pre-digested lipids. Poorly digestible complex glucosides are converted to assimilable sugars, proteins to aminoacids and oligopeptides, and lipids to free fatty acids, sugars, choline and inoxitol. Minerals, oligo-elements and vitamins are converted to assimilable forms. Content of heavy metals, esp. Cu, tannins, coumarine and other mycotoxins is reduced. Enzymes, lactic bacteria, and lactic acid are introduced.
ABSTRACTED-PUB-NO:

EP 162805B
EQUIVALENT-ABSTRACTS:

A mixt. of germinated seeds, contg. germinated, fermented cereal seeds, and germinated, fermented leguminous seeds, is preserved in the moist state by inoculating at least the germinated cereal seeds with lactic bacteria chosen for prodn. of lactic acid and preservative effect, and/or by an acid.

USE/ADVANTAGE - Is animal feeding, esp. farm animals, e.g. horses, cows, calves (claimed), heifers, pigs, goats, sheep and poultry, partic. prodn. of white veal. The process does not involve steeping or forced aeration. The mixt. contains high value nutrients, e.g. sugars, aminoacids, proteins, and pre-digested lipids. Poorly digestible complex glucosides are converted to assimilable sugars, proteins to aminoacids and oligopeptides, and lipids to free fatty acids, sugars, choline and inoxitol. Minerals, oligo-elements and vitamins are converted to assimilable forms. Content of heavy metals, esp. Cu, tannins, coumarine and other mycotoxins is reduced. Enzymes, lactic bacteria, and lactic acid are introduced.

CHOSEN-DRAWING: Dwg.0/0 Dwg.0/0

TITLE-TERMS: MIXTURE GERMINATE FERMENTATION SEED CEREAL LEGUME PLANT CONTAIN LACTIC BACTERIA LACTIC ACID ANIMAL FEED

DERWENT-CLASS: C03 D13 D16 Q35

CPI-CODES: C04-A07D; C04-B02B; C12-L09; C12-M06; D03-G04;

CHEMICAL-CODES:

Chemical Indexing M1 *01*
Fragmentation Code
M423 M424 M431 M740 M782 M903 N104 N131 N137 N512
P713 Q212 Q233 V400 V404

Chemical Indexing M1 *02*
Fragmentation Code
M423 M424 M431 M740 M782 M903 N104 N131 N137 N512
P713 Q212 Q225 Q233 V500 V540

Chemical Indexing M2 *03*
Fragmentation Code
H4 H401 H481 H8 J0 J011 J1 J171 M280 M312
M321 M331 M340 M342 M349 M381 M391 M416 M424 M431
M620 M740 M782 M903 M910 N104 N131 N137 N512 P713
Q212 Q225 Q233

UNLINKED-DERWENT-REGISTRY-NUMBERS: 0009P

SECONDARY-ACC-NO:
CPI Secondary Accession Numbers: C1985-128925
Non-CPI Secondary Accession Numbers: N1985-221959

Set Name side by side	Query	Hit Count	Set Name result set
DB=USPT,JPAB,EPAB,DWPI; PLUR=YES; OP=ADJ			
L13	gb-1366095-$.did.	1	L13
DB=JPAB,EPAB,DWPI; PLUR=YES; OP=ADJ			
L12	JP-08332030-$.did.	2	L12
DB=DWPI,USPT,EPAB,JPAB; PLUR=YES; OP=ADJ			
L11	l1 and @pd<19960809	15	L11
DB=USPT,JPAB,EPAB,DWPI; PLUR=YES; OP=ADJ			
L10	(pre$1digest$4) same (XANTHAN GUM OR CHONDROITIN SULFATE OF SUCROSE OR POLYMANNOSE OR MALTOSE OF GLUCAN OR LENTIN AN OR MANNAN OR LEVAN OR HEMICELLULOSE OR HEMI-CELLULOSE OR INULIN OR FRUCTAN OR LACTOSE OR DEXTROSE OR HONEY)	10	L10
L9	(LARCH TREE OR LARCH OR ALOE OR GUM GHATTI OR STARCH OR CELLULOSE OR FRUCTOSE OR CORN SYRUP OR CORN SIRUP OR PECTIN OR CHITIN OR ACACIA OR GUM ARABICC OR ALGIN IC ACID O CARRAGEENAN OR DEXTRAN) same (pre$1digest$4)	34	L9
L8	(pre$1digest$4) same (potato? or milk or agar or algin or locust bean gum or locustbean gum or locust-bean gum or psyllium or karaya or seed gum)	42	L8
L7	(pre$1digest$4) same (TRAGACANTH OR GUAR GUM OR GUM GUAR OR GUAR-GUM OR GRAIN FLOUR OR RICE FLOUR OR WHEAT FLOUR OR BARLEY FLOUR OR SUGAR CANE OR SUGAR-CANE OR SUGARCANE OR BEETSUG AR OR BEET-SUGAR OR BEET SUGAR)	4	L7
L6	(pre$1digest$4) same (galactose or glucose or mannose or xylose or mannose or acetylneuraminic acid or acetylgalactosamine or acetylglucosamine or arabinose)	19	L6
L5	(pre$1digest$4) and (galactose or glucose or mannose or xylose or mannose or acetylneuraminic acid or acetylgalactosamine or acetylglucosamine or arabinose)	285	L5
L4	(pre$1digest$4) and (glucuronic acid or galacturonic acid or iduronic acid or arabinogalactan)	12	L4
L3	(pre$1digest$4) same (glucuronic acid or galacturonic acid or iduronic acid or arabinogalactan)	0	L3
L2	L1 and (galactose or glucose or mannose or xylose or mannose or acetylneuraminic acid or acetylgalactosamine or acetylglucosamine or arabinose)	14	L2
DB=DWPI,USPT,EPAB,JPAB; PLUR=YES; OP=ADJ			
L1	(pre$1digest$4) same (CARBOHYDRATE OR SACCHARIDE OR DI$1SACCHARIDE OR MONO$1SACCHARIDE OR SUGAR? OR POLY$1SACCHARIDE OR OLIGO$1SACCHARIDE)	32	L1

WEST Search History

DATE: Monday, October 20, 2003

Set Name side by side	Query	Hit Count	Set Name result set
	DB=USPT,JPAB,EPAB,DWPI; PLUR=YES; OP=ADJ		
L33	L32 or l30 or l29 or l28	18	L33
L32	L26 and (honey or n-acetylneuraminic acid or fucose or N-acetylgalactosamine or N-acetylglucosaminer or glucuronic acid or galacturonic acid or arabinogalactan)	11	L32
L31	L26 and saccharide	0	L31
L30	L29 and (maltodextrin or starch or dextrin or cellulose or poly$saccharide or oligo$1saccharide)	12	L30
L29	L26 and (allose or altrose or glucose or mannose or gulose or idose or galactose or talose or sorbose or psicose or fructose or tagatose or maltose or sucrose or cellobiose or trehalose)	14	L29
L28	L27 and (sugar or mono$1saccharide or di$1saccharide or pentose or hexose or ribose or arabinose or xylose or lyxose or ribulose or xylulose)	6	L28
L27	L26 and @pd<20000317	28	L27
L26	willow$herb or Epilobium	62	L26
L25	L24 and @pd<20000317	74	L25
L24	l20 and (sun or pollution or polluted or ultra$1violet or damage or repair or protect$3 or treat$3 or treatment)	213	L24
L23	L22 and @pd<20000317	29	L23
L22	L20 and (sugar or mono$1saccharide or di$1saccharide or pentose or hexose or ribose or arabinose or xylose or lyxose or ribulose or xylulose)	64	L22
L21	L20 and (allose or altrose or glucose or mannose or gulose or idose or galactose or talose or sorbose or psicose or fructose or tagatose or maltose or sucrose or cellobiose or trehalose)	199	L21
L20	L19 and (hair or eyebrow or eyelash or mascara or shampoo or conditioner)	215	L20
L19	plant near7 (phytoagglutin or phasin or protectin or affinitino or lectin or agglutinin or glycoprotein)	1327	L19
L18	plant near7 (lectin or agglutinin or glycoprotein)	1324	L18
L17	(l14 or l15 or l16) and @pd<20000317	78	L17
L16	L13 same (maltodextrin or starch or dextrin or cellulose or poly$saccharide or oligo$1saccharide)	55	L16
L15	L13 same (allose or altrose or glucose or mannose or gulose or idose or galactose or talose or sorbose or psicose or fructose or tagatose or maltose or sucrose or cellobiose or trehalose)	32	L15

L14	L13 same (sugar or mono$1saccharide or di$1saccharide or pentose or hexose or ribose or arabinose or xylose or lyxose or ribulose or xylulose)	31	L14
L13	wheat$1germ	663	L13
L12	l6 and (allose or altrose or glucose or mannose or gulose or idose or galactose or talose or sorbose or psicose or fructose or tagatose or maltose or sucrose or cellobiose or trehalose)	16	L12
L11	l6 and (sugar or mono$1saccharide or di$1saccharide or pentose or hexose or ribose or arabinose or xylose or lyxose or ribulose or xylulose)	11	L11
DB=JPAB,EPAB,DWPI; PLUR=YES; OP=ADJ			
L10	ep-398798-$.did.	1	L10
L9	ep-0398798-$.did.	0	L9
L8	WO-9718283-$.did.	2	L8
L7	WO-9718283A1-$.did.	0	L7
DB=USPT,JPAB,EPAB,DWPI; PLUR=YES; OP=ADJ			
L6	L5 and @pd<20000317	83	L6
L5	L3 same (plant or wheat$1germ)	130	L5
L4	L3 and (plant or wheat$1germ)	749	L4
L3	L2 same (damage or repair or protect$3 or treat$3 or treatment)	6491	L3
DB=DWPI,USPT,EPAB,JPAB; PLUR=YES; OP=ADJ			
L2	hair same (ultra$1violet or sun or heat or bleach$3 or perm or permanent)	15542	L2
L1	hair same (ultra$1violet or sun or heat or bleach$3 or perm)	12075	L1

END OF SEARCH HISTORY